

AMERIFLUX
MANAGEMENT PROJECT

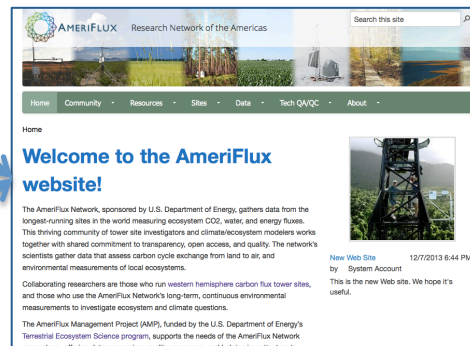
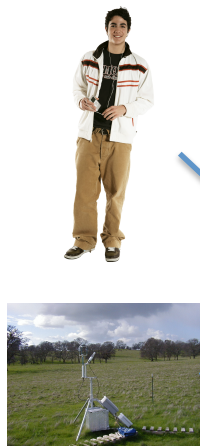
The AmeriFlux Data Management System

February 12, 2014

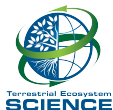
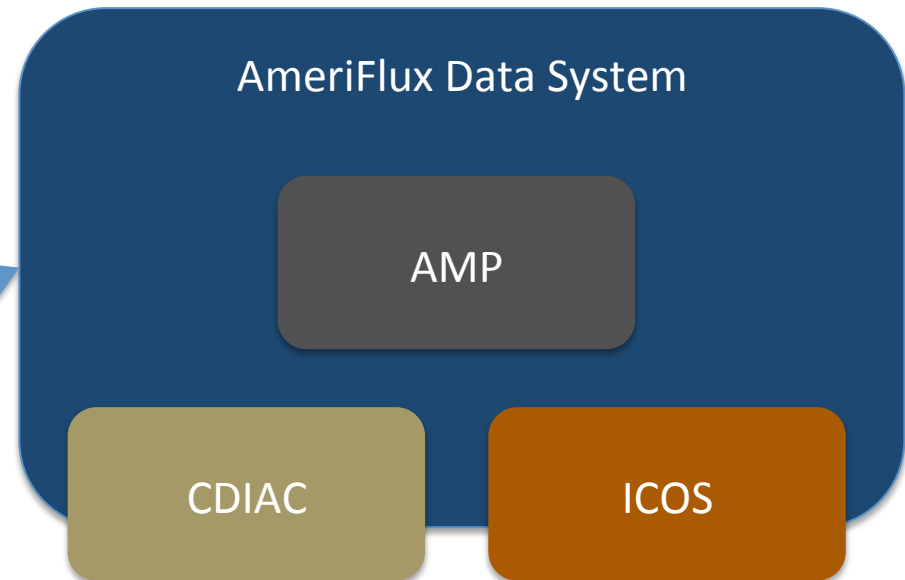
AmeriFlux Data Manager's Workshop



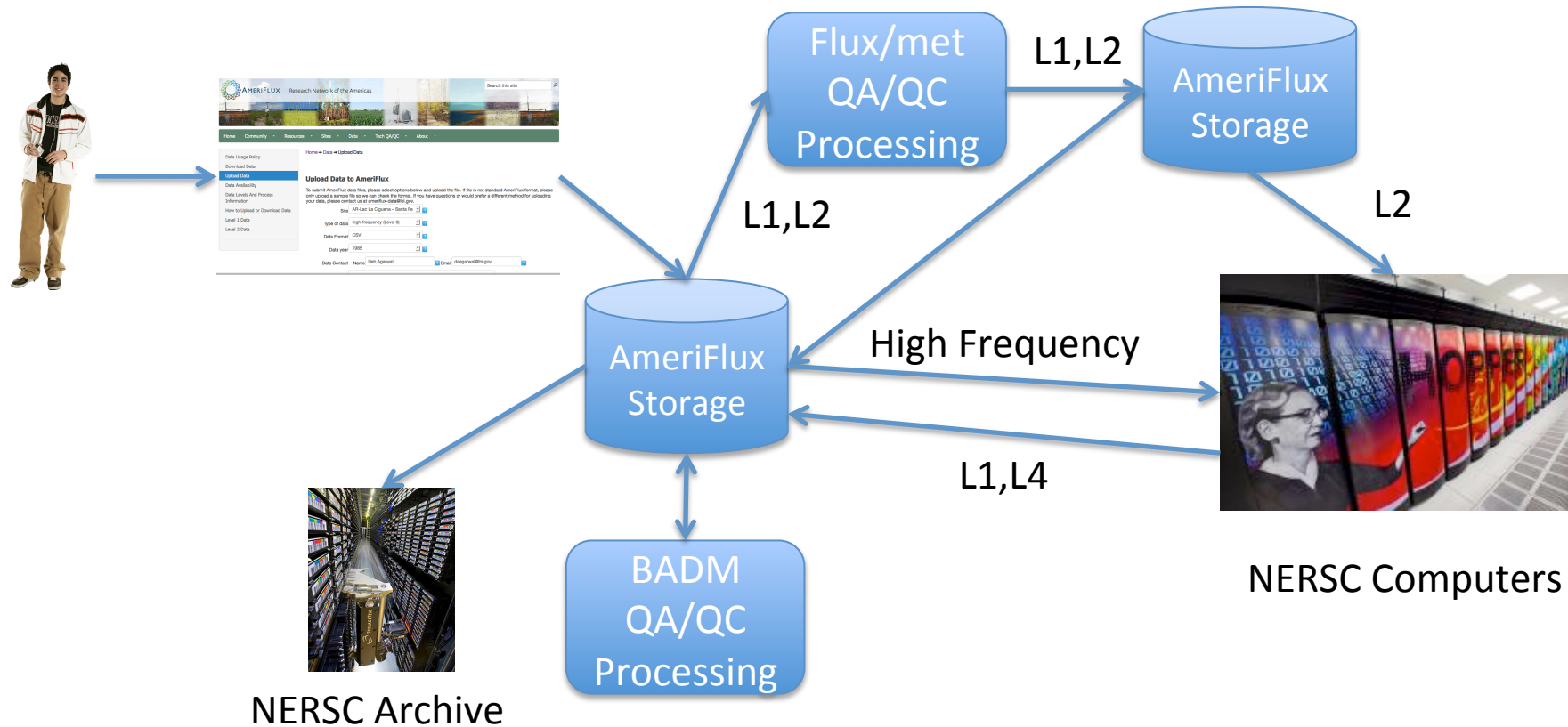
AmeriFlux Data System



Ameriflux.lbl.gov

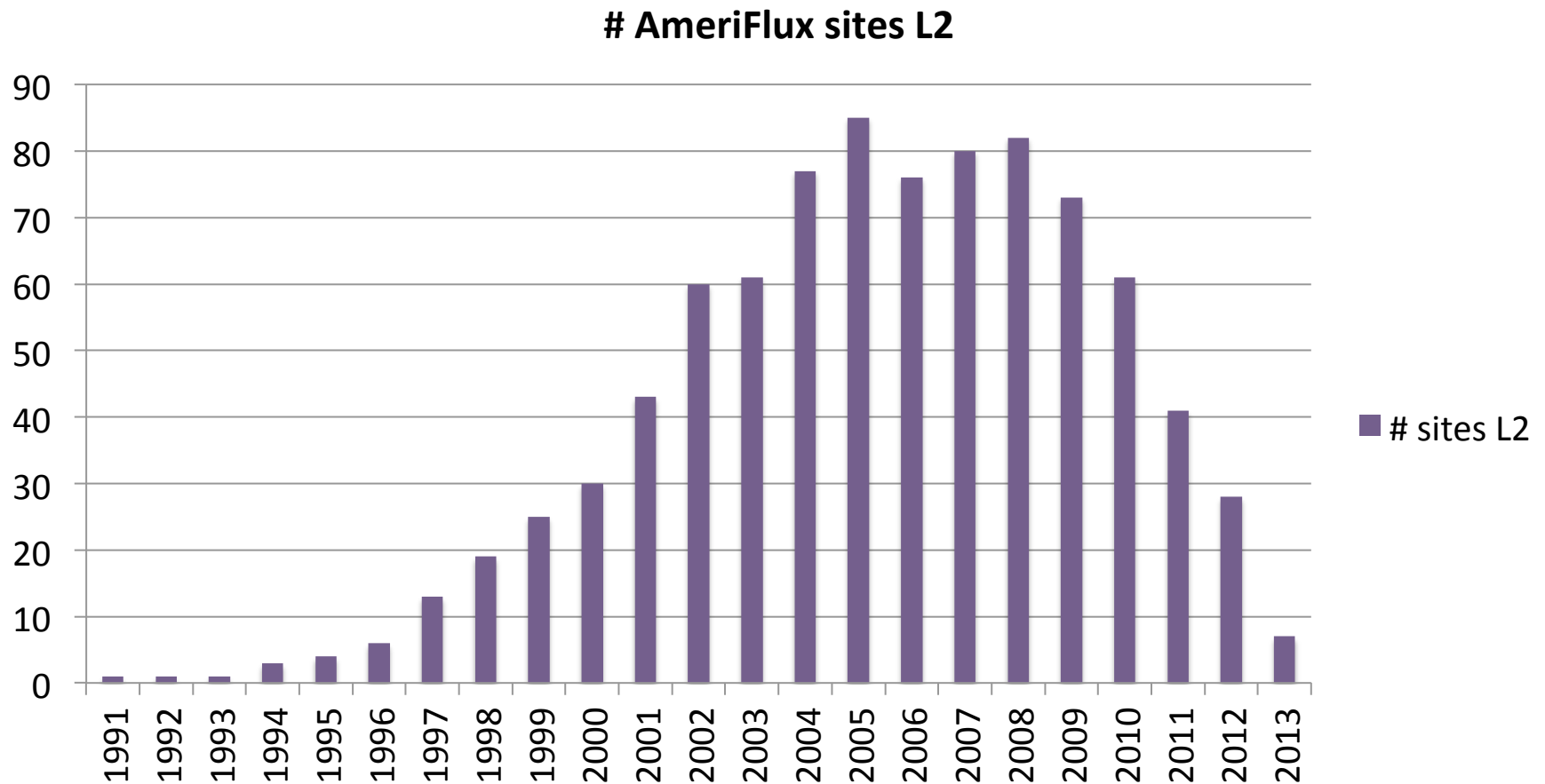


Data Submission Path



Web services provide underlying access and interaction between components

AmeriFlux Data Submission Status

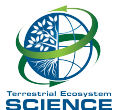
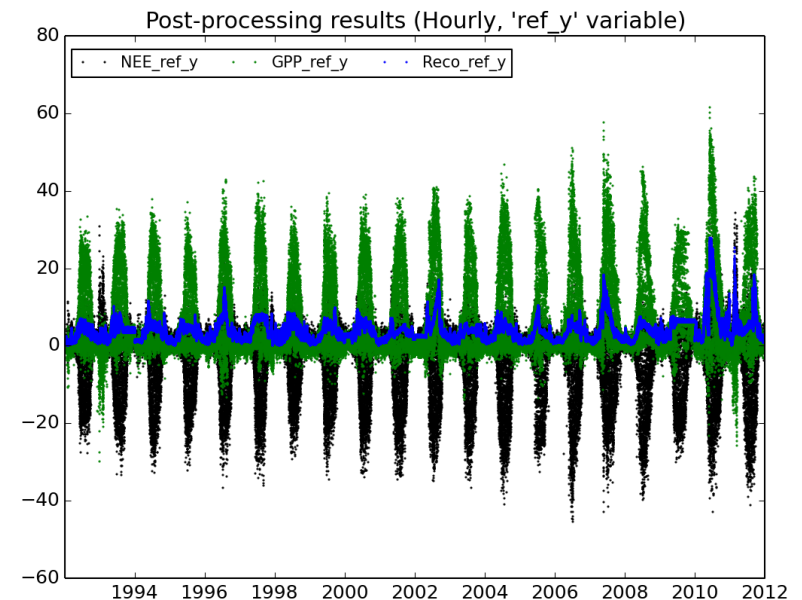


Data Team Recent Accomplishments

- AmeriFlux web portal upgrades
 - Data search and availability
 - Community blog
 - Announcements
 - All AmeriFlux data uploads via portal or automated
 - System for archiving level 0 data from sites
- New BADM protocol version building on prior version,
 - New site general information, Disturbance, and VegCover, and instrument sheets available
 - Able to send filled in templates to PIs for updates
- Data level 4 processing under way
 - Postdoc position interviews underway
- Standardization with ICOS

AMP Data Processing Activities

- Extensive collaboration with ICOS (shared code repository and computing resources)
- Joint development of new processing methods and code
 - Extended data QA/QC, with exchanges with PIs for individual sites
 - New data filtering, including methods developed in NACP (e.g., Barr et al. Ustar)
 - New uncertainty estimation
 - Improvements to and hardening of flux partitioning methods
- More details on the Weds Data Mini-Workshop



AMP Data Processing Activities

Recently Initiated Efforts

- Raw data processing
 - Centralized and standardized raw data processing (flux calculations)
 - Wider range of fluxes calculation and correction methods for uncertainty estimation
- Creation and release of frozen versions
 - Processing code
 - Data sets
- Footprint calculation

Steps for Submitting Raw Data

- Submit a completed BADM instrument sheet
- Provide sample raw data files along with associated sample processed 30 min data
- Choose a data file upload approach with AMP Staff
- Begin uploading raw data
- We will be automating raw data processing and feedback to contributor over the next year

Data Variable Names

- Standardizing with ICOS the variable naming convention
- Var_xy_z_r
 - Var – variable short name (e.g. TA, SWC, etc)
 - xy – numbers the sensors of the same type in the same horizontal plane
 - z – numbers the sensors of the same type in the vertical plane
 - r – numbers the replicas installed at the same place
- Naming for data products (gap fill, QA/QC, etc) still to be decided.
- The list of standard Variable names will be released in the next few months.

Web Site Tour

- Demo

